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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Dong-ha Chol

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EXAMINER

MAH, CHUCK Y

ART UNIT

PAPER NUMBER

3677

MAIL DATE

DELIVERY MODE

06/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/757,999	CHOI	
	Examiner	Art Unit	
	Chuck Mah	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-14,16-25 and 27-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 3-5 7-14 16-25 27-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the embodiments of claim 14 having a protrusion and a receiving part to rotatably connect the hinge cam and the supporting bracket, and claims 30-39 having alternative embodiments (e.g. cam inserted in a coupling hole of the main body, hinge cam having a first protrusion to limit an amount the cam moves into the opening of the main body etc.) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 30-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure does not show alternative embodiments as claimed in claims 30-39. Examples of such alternative embodiments are: a hinge cam inserted in the main body (claim 30), hinge body connected to the cover (claim 31), hinge cam with a first protrusion to restrict inserting of the cam into the hole (claim 22) etc.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 14, 24 and 30-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between

the elements. See MPEP § 2172.01. The omitted elements are: at least a second protrusion and a second receiving part are required. The invention does not disclose an operable embodiment having only "a first protrusion" and "a receiving part".

As to claims 30-39, it cannot be understood how the alternative embodiments are structurally and functionally incorporated into the main body and the cover, without disclosing the modification of the main body and the cover to adopt the hinge structure.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-4, 9, 10, 27-31 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (6,684,456) in view of Murata et al. (4,853,750).

Lee shows the invention as claimed (figure 3), including a cam 21, a pusher 23, brackets 27, a hinge body 26 and spring 25. Lee does not show a locking protrusion and a guide slot. Murata et al. teaches a hinge body 5 having a pusher 507 with protrusions 506 slidably engaging a guide slot 503 to guide a vertical movement of the pusher in the hinge body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hinge of Lee with a protrusion and a slot as taught by Murata et al. to guide the pusher for a smooth, vertical sliding.

As to claims 9 and 10, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the pusher or the hinge cam with a lubricating resin, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee '456 and Murata et al. '750 as applied to claims above, and further in view of Tat-Kee (4,730,364)

Lee '456 and Murata et al. '750 do not show the axis of the shaft being located toward the document glass, compared relatively to the pressure central line. '364 teaches a shaft offset the pressure centerline of the pressure device to provide a torque in a closing direction to keep the cover closed (see fig. 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to locate the axis of the shaft of Lee toward the document glass, compared to a pressure centerline acting on the cam as taught by Tat-Kee '364, to provide a torque in a closing direction to keep the cover in a closed position.

9. Claims 7, 8, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee '456 and Murata et al. '750 as applied to claims above, and further in view of Worley et al. (6,012,714).

Lee '456 and Murata et al. '750 do not show the first protrusion to limit the insertion of the hinge body and the second protrusion to prevent the release of

the hinge body. '714 teaches a hinge body (835), inserted in an opening of the scanner main body, having a first protrusion (the top flange pointing in the same direction as flange 837, see figures 8F-8H) and a second protrusion (bottom flange 837) to provide a steady, accurate aligning of the cover to the main body and to catch the complementary lip or edge of the receiving opening to prevent the hinge body from being removed from the opening (col. 9, lines 43-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made of modify the hinge body of Lee with an upper protrusion and a lower protrusion as taught by '714 to provide a steady, accurate aligning of the cover to the main body and to prevent the hinge body from being entirely removed from the receiving opening.

10. Claims 11-13, 16, 17, 21- 23, 25, 34-36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee '456 in view of Worley et al. '714.

Lee '456 does not show the first protrusion to limit the insertion of the hinge body and the second protrusion to prevent the release of the hinge body. '714 teaches a hinge body (835), inserted in an opening of the scanner main body, having a first protrusion (the top flange pointing in the same direction as flange 837, see figures 8F-8H) and a second protrusion (bottom flange 837) to provide a steady, accurate aligning of the cover to the main body and to catch the complementary lip or edge of the receiving opening to prevent the hinge body from being removed from the opening (col. 9, lines 43-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made of

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modify the hinge body of Lee with an upper protrusion and a lower protrusion as taught by '714 to provide a steady, accurate aligning of the cover to the main body and to prevent the hinge body from being entirely removed from the receiving opening.

As to claim 21, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the pusher or the hinge cam with a lubricating resin, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee '456 and Worley et al. '714 as applied to claims above, and further in view of Adams (5,551,125).

Lee and Worley et al. do not show the pivot portion being a protrusion and a receiving part. Adams '125 teaches a pivot of a hinge having a protrusion and a receiving part to enable a quick release of the hinged members. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cam body with a protrusion to engage the receiving part of the hinge body as taught by '125 to enable a quick release of the hinged members.

12. Claims 18-20 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee '456 and Worley et al. '714 as applied to claims above, and further in view of Murata et al. '750.

Lee '456 and Worley et al. '714 do not show the guide and guide slot. Murata et al. teaches a hinge body 5 having a pusher 507 with protrusions 506 slidably engaging a guide slot 503 to guide a vertical movement of the pusher in the hinge body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hinge of Lee and Worley et al. with a protrusion and a slot as taught by Murata et al. to guide the pusher for a smooth, vertical sliding.

13. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee '456 and Worley et al. '714 as applied to claims above, and further in view of Tat-Kee '364.

Lee '456 and Worley et al. '714 do not show the axis of the shaft being located toward the document glass, compared relatively to the pressure central line. '364 teaches a shaft offset the pressure centerline of the pressure device to provide a torque in a closing direction to keep the cover closed (see fig. 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to locate the axis of the shaft of Lee toward the document glass, compared to a pressure centerline acting on the cam as taught by Tat-Kee '364, to provide a torque in a closing direction to keep the cover in a closed position.

Response to Arguments

14. Applicant's arguments, filed Feb. 28, 2007, with respect to the applied references have been fully considered and are persuasive. The rejection of last office action has been withdrawn.

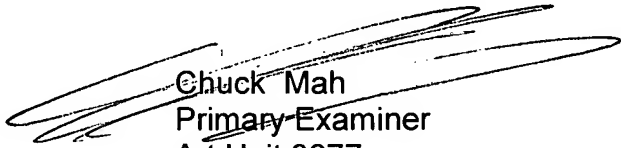
Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Mah whose telephone number is (571)272-7059. The examiner can normally be reached on 5/4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on (571)272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Chuck Mah
Primary Examiner
Art Unit 3677

CM